

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF MD 3 BUSINESS (CRAIN HIGHWAY) AND PHIRNE ROAD IN ANNE ARUNDEL COUNTY, MARYLAND. MODIFICATIONS INCLUDE THE INSTALLATION OF 16 INCH LED COUNTDOWN PEDESTRIAN SIGNAL HEADS AND AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTONS FOR THE NORTH LEG OF MD 3 BUSINESS AND THE EAST AND WEST LEGS OF PHIRNE ROAD. MD 3 BUSINESS IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

INTERSECTION OPERATION

THE INTERSECTION WILL CONTINUE TO OPERATE IN A NEMA SIX-PHASE, FULL-TRAFFIC-ACTUATED MODE WITH THE MD 3 BUSINESS APPROACHES OPERATING CONCURRENTLY AND THE PHIRNE ROAD APPROACHES OPERATING CONCURRENTLY. EXCLUSIVE/PERMISSIVE LEFT-TURN PHASING IS PROVIDED FOR NORTHBOUND AND SOUTHBOUND MD 3 BUSINESS. INTERSECTION LIGHTING IS PROVIDED ON THE SOUTHWEST CORNER AND NORTHEAST CORNER. INTERCONNECT RUNS TO THE NORTH TO HIDDENBROOK DRIVE AND TO THE SOUTH TO NOLPARK COURT. NEW AUDIBLE PUSHBUTTON ACTUATED PEDESTRIAN PHASES WILL BE PROVIDED ACROSS THE NORTH LEG OF MD 3 BUSINESS AND THE EAST AND WEST LEGS OF PHIRNE ROAD.

APS MESSAGE FOR CROSSING MD 3 BUSINESS (CRAIN HIGHWAY):

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS CRAIN AT PHIRNE, WAIT".
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

APS MESSAGE FOR CROSSING PHIRNE ROAD:

- A. WHEN PEDESTRIAN LOCATES AND PRESSES PUSHBUTTON FOR AN EXTENDED TIME, THE PUSHBUTTON UNIT WILL ANNOUNCE "WAIT TO CROSS PHIRNE AT CRAIN, WAIT".
- B. WHEN WALK PHASE BEGINS, THE MESSAGE WILL BE A RAPID TICK WHICH WILL LAST FOR THE DURATION OF THE WALK PHASE.

CONTROLLER REQUIREMENTS

THE EXISTING NEMA SIZE '6' BASE MOUNTED CABINET AND EIGHT-PHASE CONTROLLER AND ALL ASSOCIATED EQUIPMENT WILL CONTINUE TO BE USED. A 2-WIRE CENTRAL CONTROL UNIT WILL BE ADDED TO THE CABINET.

EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY SHA:

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9570	106	SF	[UPDATED] SHEET ALUMINUM GROUND MOUNTED SIGN
			- 2 EACH R10-3(1) (9"x15") "CRAIN HIGHWAY"
			- 4 EACH R10-3(1) (9"x15") "PHIRNE ROAD"
			- 4 EACH S1-1 (36"x36")
			- 4 EACH W11-2 (36"x36")
			- 6 EACH W16-7pL (24"x12")
			- 6 EACH W16-7pR (24"x12")
			- 2 EACH W16-9 (24"x12")

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
2002	3	CY	TEST PIT EXCAVATION
5005	600	LF	12 INCH WHITE LEAD FREE REFLECTIVE THERMOPLASTIC PAVEMENT MARKINGS
8001	6	EA	FURNISH AND INSTALL AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON STATION AND SIGNS
8002	5	EA	FURNISH AND INSTALL BREAKAWAY PEDESTAL POLE - ANY SIZE
8003	6	EA	FURNISH AND INSTALL 16 INCH COUNTDOWN PEDESTRIAN SIGNAL HEADS
8005	1	EA	REMOVE AND DISPOSE PER ASSIGNMENT
8008	100	LF	FURNISH AND INSTALL UP TO 4 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
8012	100	LF	NO. 6 AWG STRANDED BARE COPPER GROUND WIRE
8015	106	SF	INSTALL GROUND MOUNTED SIGN
8016	33	SF	RELOCATE EXISTING GROUND MOUNTED SIGN
8020	1400	LF	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 AWG)
8021	1450	LF	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG)

PROJECT CONTACTS

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MS. KIMBERLY TRAN
ASSISTANT DISTRICT ENGINEER - TRAFFIC
PHONE: (410) 841-1003

MR. MIKE HUBER
DISTRICT UTILITY ENGINEER
PHONE: (410) 841-1039

MR. JOSEPH GECKLE
ASSISTANT DISTRICT ENGINEER - MAINTENANCE
PHONE: (410) 841-1013

MS. CORREN JOHNSON
CHIEF, TRAFFIC OPERATIONS DIVISION
PHONE: (410) 787-7630

MR. ED RODENHIZER
CHIEF, SIGNAL SHOP SECTION
PHONE: (410) 787-7650

MR. EUGENE BAILEY
CHIEF, SIGN OPERATIONS SECTION
PHONE: (410) 787-7670

MR. MIKE STOCKER
SUPPLY OFFICE IV (SIGNAL SHOP WAREHOUSE)
PHONE: (410) 787-7696

EQUIPMENT LIST "C"

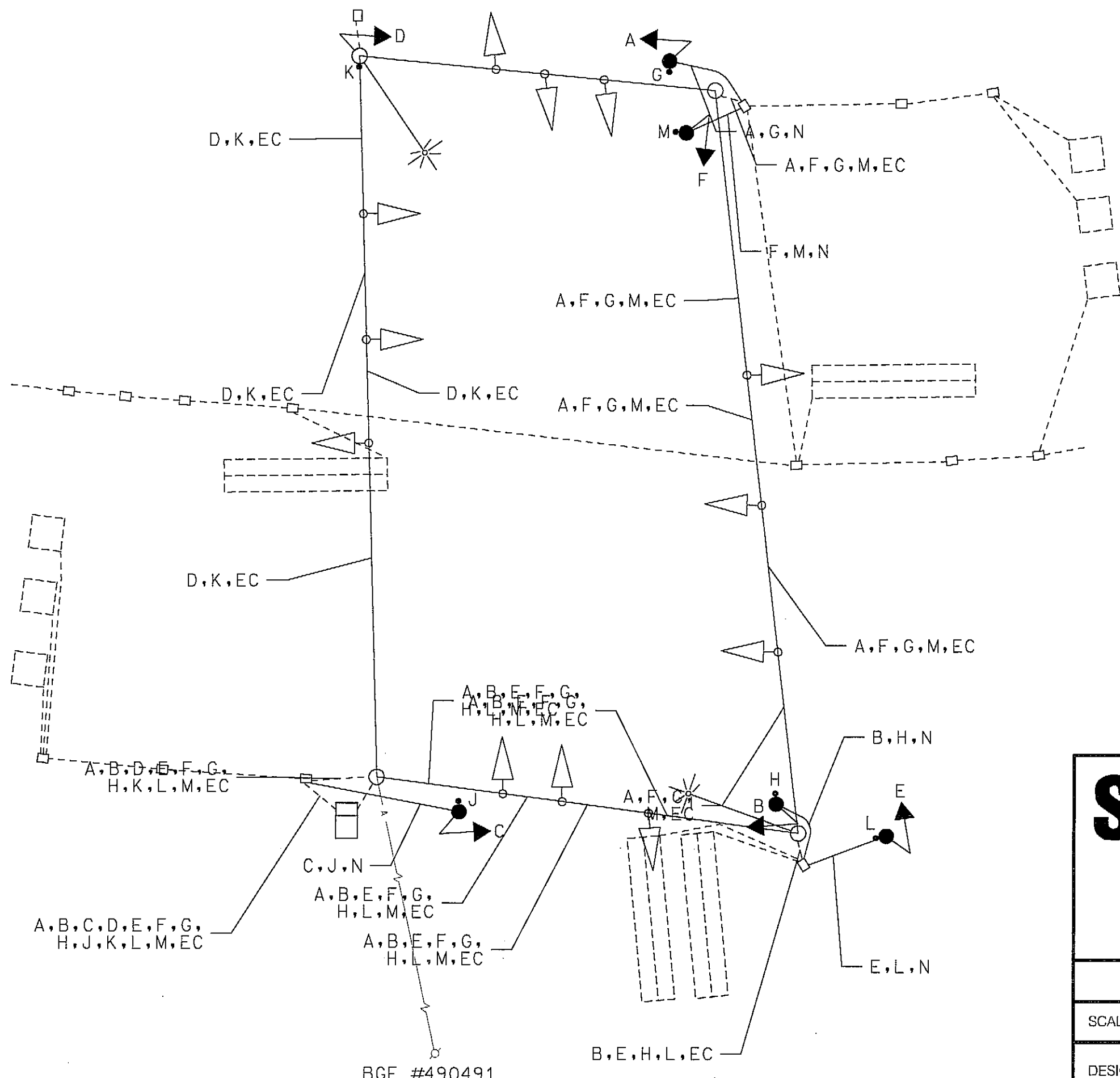
C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA:

NONE.

PHASE CHART

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G	G
PHASE 1 + 5	+G-/R	+G-/R	R	+G-/R	+G-/R	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
1 + 5 CHANGE	1 + 5 MAY CHANGE TO PHASE 1 + 6, PHASE 2 + 5, OR PHASE 2 + 6																	
PHASE 1 + 6	+G-/G	+G-/G	G	R	R	R	R	R	R	R	R	R	DW	W	W	DW	DW	DW
1 + 6 CHANGE	+Y-/Y	+Y-/Y	Y	R	R	R	R	R	R	R	R	R	DW	W	W	DW	DW	DW
PHASE 2 + 5	R	R	R	+G-/G	+G-/G	G	R	R	R	R	R	R	W	DW	DW	W	DW	DW
5 CHANGE	R	R	R	+Y-/G	+Y-/G	G	R	R	R	R	R	R	W	DW	DW	W	DW	DW
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	R	R	W	W	W	W	DW	DW
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	R	R	FL/DW	FL/DW	FL/DW	FL/DW	DW	DW
2 + 6 CHANGE	Y	Y	Y	Y	Y	Y	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW
PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	DW	DW
4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
PHASE 4 + 8 ALT	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	W	W
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	G	G	DW	DW	DW	DW	FL/DW	FL/DW
4 + 8 ALT CHANGE	R	R	R	R	R	R	Y	Y	Y	Y	Y	Y	DW	DW	DW	DW	DW	DW
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK

WIRING DIAGRAM



WIRING KEY

- A,B,C } 5 CONDUCTOR ELECTRICAL CABLE
D,E,F } (NO. 14 AWG)
- G,H,J } 2 CONDUCTOR ELECTRICAL CABLE
K,L,M } (NO. 14 AWG)
- N } STRANDED BARE COPPER GROUND
WIRE (NO. 6 AWG)
- EC } EXISTING CABLE

SHA

STATE OF MARYLAND
DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION
OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MD 3 BUSINESS (CRAIN HIGHWAY) AT
PHIRNE ROAD
GLEN BURNIE, MARYLAND

GENERAL INFORMATION SHEET

SCALE	NONE	DATE	AUGUST 26, 2013	CONTRACT NO.	XX6295178
DESIGNED BY	NJM	COUNTY	ANNE ARUNDEL		
DRAWN BY	NJM	LOGMILE	02.003301.21		
CHECKED BY	BSH	T.I.M.S. NO.	L857		
F.A.P. NO.		T.O.D. NO.			
T.S. NO.	1395E-GI	SG-02	OF SG-02	SHEET NO.	8 OF 8

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